

THREE NEW SPECIES OF MYRMELEONIDÆ

BY NATHAN BANKS

Dr. J. Bequaert on his recent trip to Arizona collected, with Mr. E. R. Tinkham, specimens of a new Myrmeleonid of the genus *Eremoleon*. It was found in a mine-shaft, and doubtless occurs in caves. The specimens are pale, the markings, although slight, are distinct, so that they are not teneral. This makes four species of this genus in the United States, others occur in Mexico.

Mr. John L. Sperry has recently sent me a small Myrmeleonid taken by himself and wife in California. It is a new species of *Clathroneuria* distinguished from all others by the very short tibial spurs.

I have added the description of a new form from the West Indies, a species of *Puren* whose known species occur in the western United States, Baja California, and Chile.

***Eremoleon pallens*, sp. nov.**

Head and thorax pale yellowish, a faint brown mark above antennæ, sometimes faint brown spots on vertex; tip of antennæ black, before it is a stretch of pale, and the basal half mostly pale, but more or less marked, mostly above, with dark; palpi scarcely dark at tips; pronotum has the front part more or less pale brown, with a narrow median pale stripe, behind with two submedian brown stripes, sometimes scarcely indicated, and a short lateral pale brown stripe; thorax above with pale brown areas, more or less separated; pleura pale; abdomen pale, with dark bands above at near tip of several segments, much as in *E. nigribasis*, but the dark on the segments tends to spread forward in middle, so sometimes the segment is largely dark above. Legs pale, tips of femora and tip and subbasal spot on tibiæ dark.

Fore wings without the basal black spot of *E. nigribasis* and without the clouds on radials of *E. macer*, few of the cross-veins brown-bordered; the subcosta, radius and cubitus are interrupted with dark spots or streaks; there are four distinct almost black marks, all small; one at the connection of anal and cubital fork, one at the rhagma, one at and above

the union of the radius and subcosta, and one on the last radial cross-vein beyond the stigma, all prominent; usually a few cross-veins obliquely beyond the rhexma less distinctly marked; many of the cross-veins are dark only at ends, the few cross-veins in apical area are pale, behind cubitus and toward tip are more dark cross-veins. In hind wing the three apical dark marks are present, but none near end of anal.

The pronotum is rather shorter than in *E. nigribasis*, the hair above is black, no long white ones on lower sides.

The fore wings are shaped more like *E. macer*, more broadened beyond the anal vein than in *E. nigribasis*; five to seven cross-veins before the radial sector, six radials before the stigma, about seven branches to radial sector, two or three cross-veins between cubital fork and first anal vein, and about five before cubital fork, none crossed.

The legs are slender as in other species, the basal tarsal joint fully as long, the spurs on front legs are equal to three joints, those of hind pair a little more than two joints.

Length of fore wing 22 to 25 mm., width 7 to 8 mm.

From Picacho Peak, Arizona, 23 July (Bequaert, Tinkham, and Flock), in a mine shaft. Type M.C.Z. no. 25519; paratypes, M.C.Z., Univ. Arizona, and with E. R. Tinkham.

***Puren imbellis* sp. nov.**

Head and thorax yellowish, face with a large dark inter-antennal mark, truncate below antennæ, and above extending nearly to the vertex, but leaving a median pale yellowish spot; first vertex row of four almost connected black lines, behind is a row of brown spots, the median pair extending backward; palpi pale, last joint of labial palpi scarcely dark; antennæ pale on basal half, the joints faintly ringed with brown, beyond becoming darker where the tip is nearly black.

Pronotum pale brownish, with a median white line, and a lateral dark brown stripe near edge; thorax above pale brownish in middle, dark on sides and lobes; pleura pale yellowish; abdomen brown, with a pale median line or spots, that on second segment is a line, elongately enlarged at middle, and slightly enlarged at tip; third segment has a broad pale spot at base, partly divided at base and followed by a line which is widened at tip; fourth segment with a

large pale spot at base, tapering toward tip; beyond mostly brown.

Legs pale, tips of femora dark, front and mid tibiae largely dark, hind tibia dark at tip only, tarsi mostly dark at base and tip. Fore wings with the subcosta much interrupted with brown, radius with longer brown streaks, cubitus with more separated streaks; cross-veins often dark at ends; an oblique brown line up from near end of anal vein, and another obliquely outward from the rhagma; last radial cross-vein plainly bordered with brown, and some others faintly marked behind it, in hind wing last radial cross-vein bordered with dark.

Pronotum nearly as broad behind as long in middle, sides parallel, only short black hair above. Legs not as stout as in *P. inscriptus*, the femora not swollen; front and mid tibiae with both black and white spines, hind tibiae with black spines; spurs of front legs equal to three joints, of hind legs equal to two tarsal joints. In the fore wings the costal area is swollen, and the double series of cells reaches to the origin of radial sector; seven cross-veins before radial sector, ten radials before stigma, ten or eleven branches to radial sector, four cross-veins between cubital fork and first anal vein, no cubito-anal cells crossed; venation not especially dense.

In hind wing the tip is acute, the hind margin toward base almost concave, twelve radials before stigma, anal vein ends some distance before cubital fork, and with but four branches to margin.

Length of fore wing 23 mm., width 5 mm., length of hind wing 23.5 mm., width 4 mm.

From Port au Prince, Haiti, 20 November, R. C. Smith collector. Type M.C.Z. no. 25520.

Clathroneuria arioles sp. nov.

Face with a large black interantennal mark, reaching well below the antennae and up nearly to the first vertex row, between this and the vertex mark is a pale transverse line from eye to eye; vertex largely black with two small pale spots near middle of front and two on each side toward eyes; antennae dull black, tip rather paler; palpi black, last joint moderately swollen; pronotum with a very broad black median stripe, in the front part of which is a median pale

line, and on each side of posterior two-thirds is another pale stripe; there is a short submarginal dark stripe on posterior part each side. Meso- and metanotum mostly black, more or less spotted with pale, mostly near middle; pleura dark, with a few pale spots below wings. Abdomen dull black the first, second, and basal half of third segments with a pale stripe each side above. Legs pale, the femora and tibiae with some black spots or bands, apex of tibia black, tarsi with the whole of the fourth joint, and the tip of the others black.

Wings with the venation largely black, the subcosta much interrupted with snow-white, the radius less interrupted with pale, toward stigma the medius is white for a long distance, cubitus interrupted with white, and also the radial sector; many cross-veins partly or wholly white. Along the cubitus and at intervals beyond it is bordered with black, and a longer black streak obliquely up from the rhegma; at base of stigma and back on radius it is black.

In hind wings venation mostly black, but subcosta and radius interrupted with pale.

Pronotum much longer than broad, narrowed in front, the erect bristles are black, and short more appressed hair is white. Wings slender; in fore wing three cross-veins before radial sector, latter with six branches, some of the costals forked before stigma, a few cross-veins in apical field, eight or nine cubito-anal cross-veins before cubital fork, none connected; first anal vein connected to cubital fork three times; third anal with small apical fork; most of the cells in middle of wing are plainly longer than broad.

In hind wings two cross-veins before radial sector, latter with six branches, first anal connected once to cubital fork and with eight or nine branches to the margin.

The legs are moderately slender, more so than in the other small species of the genus, especially long is the tibia; most of the bristles are black; the spurs, unlike all the allied species, are short, hardly two-thirds as long as the basitarsus.

Length of body 20 mm., length of fore wing 16 mm., width 4 mm. One from Riverside, Calif., 25 September 1940, from Grace H. and John L. Sperry, to whom I am much indebted for many fine Neuroptera. Readily separated from others by the abbreviated tibial spurs. Type M.C.Z. no. 25568.